

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently ~~amended~~) A hard handoff method ~~between~~ from an asynchronous CDMA ~~system and base station to~~ a synchronous CDMA ~~system~~ base station, comprising:

A
a first step ~~for~~ of the synchronous CDMA base station transmitting asynchronous CDMA channels ~~from synchronous CDMA base stations including an asynchronous CDMA~~ synchronization channel and an asynchronous CDMA common pilot channel to a mobile terminal that is in communication with the asynchronous CDMA base station with a purpose of synchronizing a handoff time at the synchronous CDMA base station ~~and a code used at the synchronous CDMA base station, the transmission being done by a mobile terminal that is in communication with an asynchronous CDMA base station, the transmission being a part of handoff process and the mobile terminal performing the hard handoff to the synchronous CDMA base station;~~

a second step ~~for~~ of, on the basis of a result of measuring an intensity of the asynchronous CDMA channels, the mobile terminal reporting the ~~a measured result to the asynchronous CDMA base station on the basis of an intensity of an asynchronous CDMA pilot channel received from an adjacent synchronous CDMA base station, the reporting being done by the mobile terminal;~~

a third step ~~for~~ of the asynchronous CDMA base station transmitting a handoff request message to the synchronous CDMA base station on the basis of the measured result reported to the asynchronous CDMA base station, ~~the transmission being done by the asynchronous CDMA base station;~~

a fourth step ~~for~~ of the synchronous CDMA base station which receives the handoff request message transmitting an information to the asynchronous CDMA base station,

~~wherein the information is necessary to perform the hard handoff, the transmission being done by the synchronous CDMA base station that receives the handoff request message; and~~

a fifth step ~~for~~ of the mobile terminal performing the hard handoff to the synchronous CDMA base station, the hard handoff being performed by the mobile terminal that receives by using the information that is received through a traffic channel from the asynchronous CDMA base station.

2. (Currently amended) The hard handoff method of claim 1, wherein the first step comprises:

~~transmitting an~~ the asynchronous CDMA synchronization channel and a the asynchronous CDMA common pilot channel; and

synchronizing the asynchronous CDMA synchronization channel and the asynchronous CDMA common pilot channel with a starting point of an synchronous pilot channel, the synchronous pilot channel being transmitted from the synchronous CDMA base station.

3. (Currently amended) The hard handoff method of claim 1, wherein the second step comprises:

measuring an intensity of signals received from the asynchronous CDMA base station and the adjacent synchronous CDMA base station using the asynchronous CDMA synchronization channel and the asynchronous CDMA common pilot channel, the measurement being done by the mobile terminal that is in communication with the asynchronous CDMA base station;

reporting the intensity of signals and an information regarding the synchronous CDMA base station, ~~the report being done by the mobile terminal if the intensity of signals received from the synchronous CDMA base station is bigger than an intensity of signals received from the asynchronous CDMA base station by a predetermined value; and~~

returning to the measuring step if the intensity of signals received from the synchronous CDMA base station is not bigger than the intensity of signals received from the asynchronous CDMA base station by the predetermined value.

4. (Currently amended) The hard handoff method of claim 1, wherein the information necessary to perform the hard handoff includes a starting point of the hard handoff, a long code state at the starting point of the hard handoff, an offset index of a pilot PN (pseudo noise) sequence, a code channel index used in a forward traffic channel, and an offset value regarding the traffic channel.

5. (Currently amended) The hard handoff method of claim 1, wherein the fifth step comprises:

receiving the information from the asynchronous CDMA base station through the traffic channel;

releasing the traffic channel established with the asynchronous CDMA base station and establishing a traffic channel with the synchronous CDMA base station;

exchanging an available frame between the mobile terminal and the synchronous CDMA base station through the established traffic channel and confirming a handoff completion; and

releasing resources between the asynchronous CDMA base station and a switch, the synchronous CDMA base station reporting the handoff completion to the switch.

6. (Currently amended) The hard handoff method of claim 5, wherein the traffic channel ~~is established~~ between the mobile terminal and the synchronous CDMA base station is established using the starting point of the hard handoff, the long code state at the starting point of the hard handoff, the offset index of the pilot PN sequence, the code channel index used in the forward traffic channel, and the offset value regarding the traffic channel.

7. (Original) The hard handoff method of claim 6, wherein the starting point of the hard handoff is determined by calculating how many frames of the common pilot channel have passed at the asynchronous CDMA base station from the moment when the mobile terminal receives the information.

8. (Canceled)

9. (New) A mobile terminal capable of performing a hard handoff from an asynchronous CDMA base station to a synchronous CDMA base station, wherein the terminal is arranged to perform steps comprising:

receiving asynchronous CDMA channels including an asynchronous CDMA synchronization channel and an asynchronous CDMA common pilot channel from the synchronous CDMA base station, while being in communication with the asynchronous CDMA base station;

reporting a measured result to the asynchronous CDMA base station on the basis of an intensity of the asynchronous CDMA channels received from the synchronous CDMA base station, wherein the measured result is used in order for the asynchronous CDMA base station to transmit a handoff request message to the synchronous CDMA base station which subsequently transmits a handoff information to the asynchronous CDMA base station; and

performing the hard hand off to the synchronous CDMA base station by using the handoff information which is received through a traffic channel from the asynchronous CDMA base station.
